

[INCH-POUND]
A-A-59789/10D
10 August 2016
SUPERSEDING
A-A-59789/10C
10 October 2015

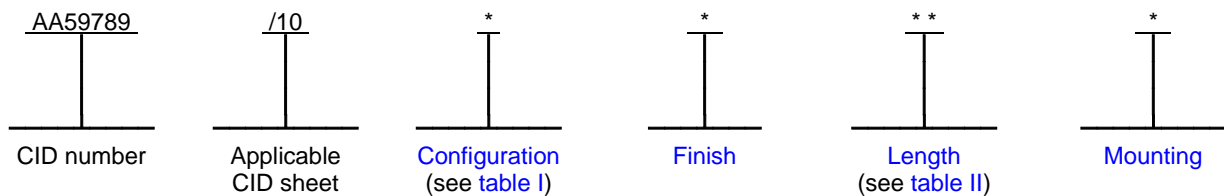
COMMERCIAL ITEM DESCRIPTION
SPECIFICATION SHEET

HOLDER, ELECTRICAL CARD, WEDGE RETAINERS, 5 PIECE, FOR COLD PLATE APPLICATIONS,
.225 X .225 INCH BODY SIZE, SHAFT MOUNTING BODY, SCREW ACTUATED,
WITH VISUAL LOCK INDICATION

The General Services Administration has authorized the use of this
commercial item description for all federal agencies.

The complete requirements for procuring electrical card holders described herein shall consist of this document and
the latest issue in effect of [A-A-59789](#).

CLASSIFICATION/PART IDENTIFICATION NUMBER (PIN). This commercial item description (CID) specification
sheet uses a classification system which is included in the PIN as shown in the following example (see [notes](#)).



Example: AA59789/10LH50S is the PIN for a hard black anodize finished, 4.8 inch (121.9 mm) long card holder with
visual lock indication. The card holder also features two tapped mounting holes for use with 2-56 UNC 2B fasteners
and a screw self-locking element for added resistance to loosening.

SALIENT CHARACTERISTICS.

Performance. Card holders shall hold the circuit card assembly it is attached to firmly in its installed position and
prevent loosening or movement as a result of shock and vibration. The card holder shall also provide a thermal
transfer path from the circuit card assembly to the cold plate or heat sink surfaces.

Interface and physical dimensions. The card holders supplied to this CID specification sheet shall be as specified
herein and meet the general requirements specified in CID [A-A-59789](#).

Material. Unless otherwise specified herein, the card holder materials shall be as specified in [A-A-59789](#).

Actuating screw hex drive socket. The dimension for hex drive socket shall be .094 inch (2.38 mm) across flats for
mounting options "M", "R", "S", "T", and "U".

Cold plate slot width. The recommend cold plate slot width to accommodate the circuit card assembly with attached
card holder is .250 inch (6.35 mm) plus the thickness of the printed board of the circuit card assembly (see
[A-A-59789](#)).

Installation torque. The recommended nominal installation torque is follows: 6 inch-pounds (0.7 N-m) for card
holders of configuration "C" or "E" and 7 to 8 inch-pounds (0.8 to 0.9 N-m) for assemblies of configurations "L" or "D".

AMSC N/A

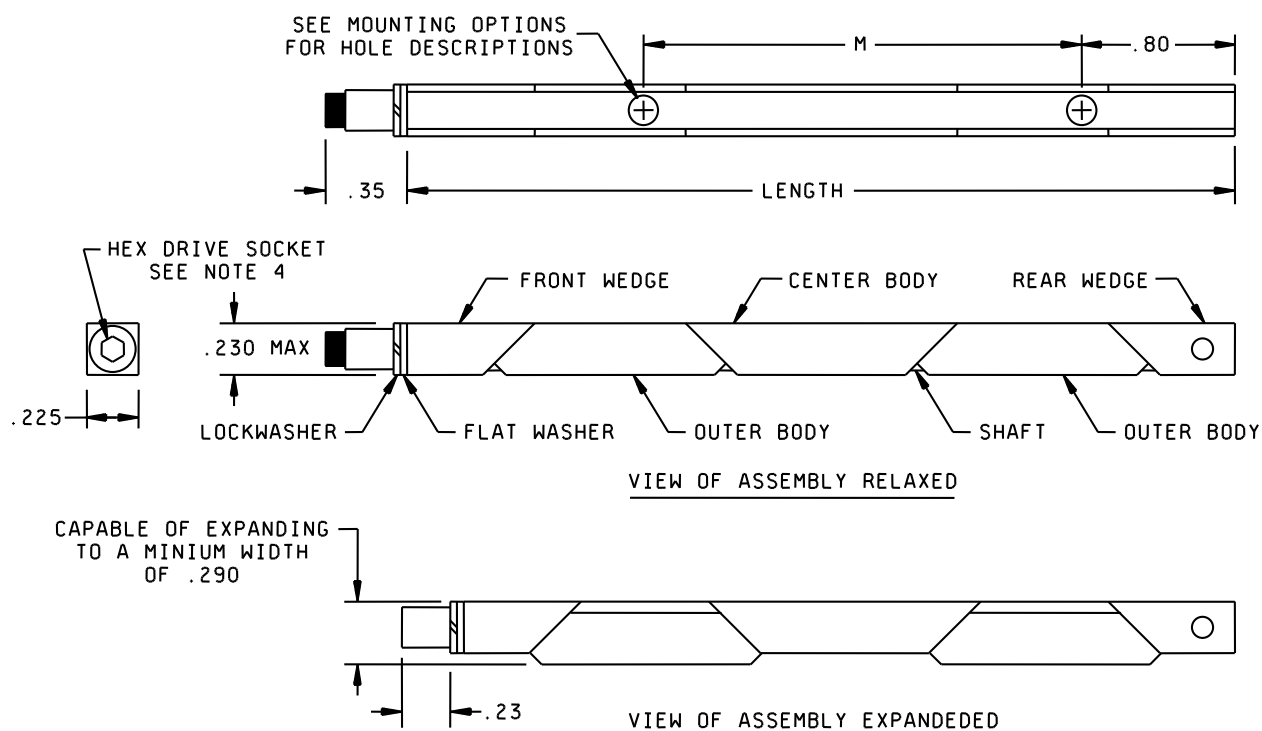
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Configuration. The configuration of a card holder shall be as specified in table I. The details of a particular configuration consist of those on figures 1 and 2, and may include those on figures 3 and 4.

TABLE I. Configurations.

Configuration	Applicable figures	Hardware options
C	1 and 2	No added options
L	1, 2, and 3	Screw self-locking element
E	1, 2, and 4	Additional mounting hole
D	1, 2, 3, and 4	Screw self-locking element and additional mounting hole



Inches	mm	Inches	mm	Inches	mm	Inches	mm	Inches	mm
.225	5.71	.230	5.84	.290	7.37	.35	8.9	.80	20.3

NOTES:

1. Dimensions are in inches. Millimeter equivalents are given for general information only.
2. Unless otherwise specified, tolerances are ± 0.02 inch (0.51 mm) for two place decimals and ± 0.010 inch (0.25 mm) for three place decimals.
3. Tolerance for the hole spacing is ± 0.005 inch (0.51 mm).
4. The across flats dimension for hex drive socket shall be .094 inch (2.38 mm).

FIGURE 1. Relaxed and expanded dimensions.

Finish. The wedge body finish designator shall be as specified in [A-A-59789](#). The wedge body finishes available for this CID specification sheet are as follows: "B" (black anodize), "E" (electroless nickel), "H" (hard black anodize), or "R" (clear chemical film).

Length, expanded, and relaxed dimensions. The length designator shall be as specified in [A-A-59789](#) and the lengths available for this CID specification sheet are listed in [table II](#). The length, expanded, and relaxed dimensions shall be as specified on [figure 1](#).

Visual lock indicator (see figure 2). Card holders shall have a visual indicator to show when the card holder is in its relaxed state (unlocked). When the card holder is in the relaxed state (unlocked), the end of the actuating screw shall display a red band on the side of the screw. When the actuating screw on the card holder has been tightened so that the assembly is in the expanded state (locked), this red band shall be concealed.

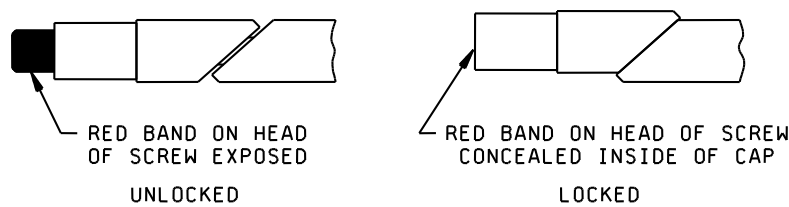


FIGURE 2. Visual lock indicator.

TABLE II. Additional card holder dimensions (see figure 1). 1/

PIN length designator	Dimension "Length" ± .02 (0.5)	Dimension "M" ± .01 (0.3)	Dimension "M/2" ± .02 (0.5)
30	2.80 (71.1)	.90 (22.9)	.45 (11.4)
40	3.80 (96.5)	1.90 (48.3)	.95 (24.1)
50	4.80 (121.9)	2.90 (73.7)	1.45 (36.8)

1/ Dimensions are in inches. Millimeters, in parenthesis, are given for general information only.

Mounting. The mounting designators shall be as specified in [A-A-59789](#). The mounting options available for this CID specification sheet are as follows: "M" (tapped metric M2.5 x 0.45 holes), "R" (rivet mount holes with counterbore and countersink), "S" (tapped 2-56 holes), "T" (tapped 0-80 holes), or "U" (tapped metric M2 x 0.4 holes). See [figure 1](#) and table II for mounting hole spacing requirements.

Rivet mounting holes. The holes used for rivet mounting shall be .068/.073 inch (1.73/1.85 mm) diameter, countersunk 100 degrees by .060 inch (1.52 mm) deep.

Rivets. This card holder uses rivet type A as specified in [A-A-59789](#) when rivet mounting is used.

Configuration hardware options. Card holders can have the following hardware options: no hardware options added, screw self lock element (see [figure 3](#)), additional mounting hole (see [figure 4](#)) or screw self lock element and additional mounting hole. See [table I](#) for the correct PIN configuration identifier for the hardware option needed. Card holders requiring no added hardware options shall include configuration identifier "C" in the PIN (see [table I](#), [classification](#) and [notes](#) section herein).

Screw self-locking element (see figure 3). The use of a screw self-locking element on the screw will provide a prevailing-torque for increased resistance to loosening of the card holder assembly from shock and vibration. The screw self-locking element shall be as specified in [A-A-59789](#). Card holders requiring a screw self-locking element shall include configuration identifier "L" in the PIN (see [table I, classification](#) and [notes](#) section herein).

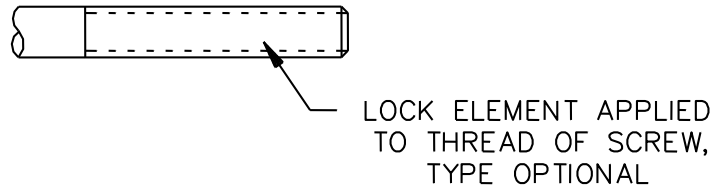


FIGURE 3. Screw self-locking element details.

Additional mounting hole (see figure 4). Card holders requiring an additional mounting hole shall include configuration identifier "E" in the PIN (see [table I, classification](#) and [notes](#) section herein).

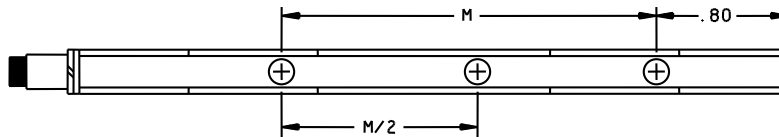


FIGURE 4. Additional mounting hole details.

Screw self-locking element and additional mounting hole. Card holders requiring a screw self-locking element and an additional mounting hole option shall include configuration identifier "D" in the PIN (see [table I, classification](#) and [notes](#) section herein).

NOTES.

PIN. The PIN should be used for Government purposes to buy commercial products to this CID specification sheet. See the classification section for PIN format example.

Source of documents.

Commercial Item Description

[A-A-59789](#) – Holder, Electrical Card, Wedge Retainers, 5 Piece, For Cold Plate Applications, General Requirements For.

(Copies of these documents are available online at <http://quicksearch.dla.mil>.)

Ordering data. Ordering data shall be as specified in [A-A-59789](#).

Commercial products. As part of the market analysis and research effort, this CID specification sheet was coordinated with the following manufacturers of commercial products. At the time of CID specification sheet preparation and coordination, these manufacturers were known to have commercial products that would meet the requirements of this CID specification sheet. (NOTE: This information should not be considered as a list of approved manufacturers or be used to restrict procurement to only the manufacturers shown.)

Manufacturer CAGE	Manufacturer name and address	Manufacturer contact information	
5BG68	American Circuit Card Retainers, Inc. 2310 E. Orangethorpe Avenue Anaheim, CA 92806-1231	Telephone: (714) 738-6194 Facsimile: (714) 446-0119 E-mail: sales@accrmfg.com URL: www.accrmfg.com	
76096	Elma Electronic, Inc. 44350 Grimmer Blvd. Fremont, CA 94538-6385	Telephone: (510) 656-3400 Facsimile: (510) 656-3783 Electronic mail: sales@elma.com URL: www.elma.com	
61081	Pentair Technical Products (formerly Calmark) 7328 Trade Street San Diego, CA 92121-3410	Telephone: (858) 740-2400 Toll Free: (800) 854-7086 Facsimile: (858) 740-2430 E-mail: schroff.us@pentair.com URL: www.pentairprotect.com	
3E7U8	Simon Industries Inc. dba Wakefield-Vette 2910 Industrial Drive Raleigh, NC 27609-7529	Telephone: (919) 469-2004 Facsimile: (919) 469-2827 E-mail: wedgelocks@wakefield.com URL: www.wakefield-vette.com	

Part number supersession data. This CID specification sheet PINs supersedes the following manufacturer's part numbers as shown in table III. The CID PINs listed in table III are only for length designator "50". See [table IV](#) for CID PIN construction using other available lengths for this CID specification sheet. This information is being provided to assist in reducing proliferation in the Government inventory system.

TABLE III. Commercial part number supersession data.

PIN designator AA59789/10	Vendor similar designator or type part number 1/ 2/			
	CAGE 5BG68	CAGE 76096	CAGE 61081	CAGE 3E7U8
CB50M	5266VBA-4.80TM2.5	290-B0480T22NVNN	VA265-4.80TM2.5	422C-480MSB-V
CB50R	5266VBA-4.80H	290-B0480T25NVNN	VA265-4.80H	422C-480RSB-V
CB50S	5266VBA-4.80T2	290-B0480T21NVNN	VA265-4.80T2	422C-480SSB-V
CB50T	5266VBA-4.80T0	290-B0480T23NVNN	VA265-4.80T0	422C-480TSB-V
CB50U	5266VBA-4.80TM2	290-B0480T24NVNN	VA265-4.80TM2	422C-480USB-V
LB50M	5266VBA-4.80TM2.5L	290-B0480T22LVNN	VA265-4.80TM2.5L	422C-480MSB-PV
LB50R	5266VBA-4.80HL	290-B0480T25LVNN	VA265-4.80HL	422C-480RSB-PV
LB50S	5266VBA-4.80T2L	290-B0480T21LVNN	VA265-4.80T2L	422C-480SSB-PV
LB50T	5266VBA-4.80T0L	290-B0480T23LVNN	VA265-4.80T0L	422C-480TSB-PV
LB50U	5266VBA-4.80TM2L	290-B0480T24LVNN	VA265-4.80TM2L	422C-480USB-PV

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/10	Vendor similar designator or type part number 1/ 2/			
	CAGE 5BG68	CAGE 76096	CAGE 61081	CAGE 3E7U8
EB50M	5266VBA-4.80ETM2.5	290-B0480T32NVNN2	VA265-4.80ETM2.5	422C-480MSB-CV
EB50R	5266VBA-4.80EH	290-B0480T35NVNN	VA265-4.80EH	422C-480RSB-CV
EB50S	5266VBA-4.80ET2	290-B0480T31NVNN	VA265-4.80ET2	422C-480SSB-CV
EB50T	5266VBA-4.80ET0	290-B0480T33NVNN	VA265-4.80ET0	422C-480TSB-CV
EB50U	5266VBA-4.80ETM2	290-B0480T34NVNN	VA265-4.80ETM2	422C-480USB-CV
DB50M	5266VBA-4.80ETM2.5L	290-B0480T32LVNN	VA265-4.80ETM2.5L	422C-480MSB-CPV
DB50R	5266VBA-4.80EHL	290-B0480T35LVNN	VA265-4.80EHL	422C-480RSB-CPV
DB50S	5266VBA-4.80ET2L	290-B0480T31LVNN	VA265-4.80ET2L	422C-480SSB-CPV
DB50T	5266VBA-4.80ET0L	290-B0480T33LVNN	VA265-4.80ET0L	422C-480TSB-CPV
DB50U	5266VBA-4.80ETM2L	290-B0480T34LVNN	VA265-4.80ETM2L	422C-480USB-CPV
CE50M	5266VEN-4.80TM2.5	290-N0480T22NVNN	VEN265-4.80TM2.5	422C-480MSE-V
CE50R	5266VEN-4.80H	290-N0480T25NVNN	VEN265-4.80H	422C-480RSE-V
CE50S	5266VEN-4.80T2	290-N0480T21NVNN	VEN265-4.80T2	422C-480SSE-V
CE50T	5266VEN-4.80T0	290-N0480T23NVNN	VEN265-4.80T0	422C-480TSE-V
CE50U	5266VEN-4.80TM2	290-N0480T24NVNN	VEN265-4.80TM2	422C-480USE-V
LE50M	5266VEN-4.80TM2.5L	290-N0480T22LVNN	VEN265-4.80TM2.5L	422C-480MSE-PV
LE50R	5266VEN-4.80HL	290-N0480T25LVNN	VEN265-4.80HL	422C-480RSE-PV
LE50S	5266VEN-4.80T2L	290-N0480T21LVNN	VEN265-4.80T2L	422C-480SSE-PV
LE50T	5266VEN-4.80T0L	290-N0480T23LVNN	VEN265-4.80T0L	422C-480TSE-PV
LE50U	5266VEN-4.80TM2L	290-N0480T24LVNN	VEN265-4.80TM2L	422C-480USE-PV
EE50M	5266VEN-4.80ETM2.5	290-N0480T32NVNN	VEN265-4.80ETM2.5	422C-480MSE-CV
EE50R	5266VEN-4.80EH	290-N0480T35NVNN	VEN265-4.80EH	422C-480RSE-CV
EE50S	5266VEN-4.80ET2	290-N0480T31NVNN	VEN265-4.80ET2	422C-480SSE-CV
EE50T	5266VEN-4.80ET0	290-N0480T33NVNN	VEN265-4.80ET0	422C-480TSE-CV
EE50U	5266VEN-4.80ETM2	290-N0480T34NVNN	VEN265-4.80ETM2	422C-480USE-CV
DE50M	5266VEN-4.80ETM2.5L	290-N0480T32LVNN	VEN265-4.80ETM2.5L	422C-480MSE-CPV
DE50R	5266VEN-4.80EHL	290-N0480T35LVNN	VEN265-4.80EHL	422C-480RSE-CPV
DE50S	5266VEN-4.80ET2L	290-N0480T31LVNN	VEN265-4.80ET2L	422C-480SSE-CPV
DE50T	5266VEN-4.80ET0L	290-N0480T33LVNN	VEN265-4.80ET0L	422C-480TSE-CPV
DE50U	5266VEN-4.80ETM2L	290-N0480T34LVNN	VEN265-4.80ETM2L	422C-480USE-CPV

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/10	Vendor similar designator or type part number 1/ 2/			
	CAGE 5BG68	CAGE 76096	CAGE 61081	CAGE 3E7U8
CH50M	5266VBH-4.80TM2.5	290-H0480T22NVNN	VHA265-4.80TM2.5	422C-480MSH-V
CH50R	5266VBH-4.80H	290-H0480T25NVNN	VHA265-4.80H	422C-480RSH-V
CH50S	5266VBH-4.80T2	290-H0480T21NVNN	VHA265-4.80T2	422C-480SSH-V
CH50T	5266VBH-4.80T0	290-H0480T23NVNN	VHA265-4.80T0	422C-480TSH-V
CH50U	5266VBH-4.80TM2	290-H0480T24NVNN	VHA265-4.80TM2	422C-480USH-V
LH50M	5266VBH-4.80TM2.5L	290-H0480T22LVNN	VHA265-4.80TM2.5L	422C-480MSH-PV
LH50R	5266VBH-4.80HL	290-H0480T25LVNN	VHA265-4.80HL	422C-480RSH-PV
LH50S	5266VBH-4.80T2L	290-H0480T21LVNN	VHA265-4.80T2L	422C-480SSH-PV
LH50T	5266VBH-4.80T0L	290-H0480T23LVNN	VHA265-4.80T0L	422C-480TSH-PV
LH50U	5266VBH-4.80TM2L	290-H0480T24LVNN	VHA265-4.80TM2L	422C-480USH-PV
EH50M	5266VBH-4.80ETM2.5	290-H0480T32NVNN	VHA265-4.80ETM2.5	422C-480MSH-CV
EH50R	5266VBH-4.80EH	290-H0480T35NVNN	VHA265-4.80EH	422C-480RSH-CV
EH50S	5266VBH-4.80ET2	290-H0480T31NVNN	VHA265-4.80ET2	422C-480SSH-CV
EH50T	5266VBH-4.80ET0	290-H0480T33NVNN	VHA265-4.80ET0	422C-480TSH-CV
EH50U	5266VBH-4.80ETM2	290-H0480T34NVNN	VHA265-4.80ETM2	422C-480USH-CV
DH50M	5266VBH-4.80ETM2.5L	290-H0480T32LVNN	VHA265-4.80ETM2.5L	422C-480MSH-CPV
DH50R	5266VBH-4.80EHL	290-H0480T35LVNN	VHA265-4.80EHL	422C-480RSH-CPV
DH50S	5266VBH-4.80ET2L	290-H0480T31LVNN	VHA265-4.80ET2L	422C-480SSH-CPV
DH50T	5266VBH-4.80ET0L	290-H0480T33LVNN	VHA265-4.80ET0L	422C-480TSH-CPV
DH50U	5266VBH-4.80ETM2L	290-H0480T34LVNN	VHA265-4.80ETM2L	422C-480USH-CPV
CR50M	5266VCC-4.80TM2.5	290-R0480T22NVNN	VR265-4.80TM2.5	422C-480MST-V
CR50R	5266VCC-4.80H	290-R0480T25NVNN	VR265-4.80H	422C-480RST-V
CR50S	5266VCC-4.80T2	290-R0480T21NVNN	VR265-4.80T2	422C-480SST-V
CR50T	5266VCC-4.80T0	290-R0480T23NVNN	VR265-4.80T0	422C-480TST-V
CR50U	5266VCC-4.80TM2	290-R0480T24NVNN	VR265-4.80TM2	422C-480UST-V
LR50M	5266VCC-4.80TM2.5L	290-R0480T22LVNN	VR265-4.80TM2.5L	422C-480MST-PV
LR50R	5266VCC-4.80HL	290-R0480T25LVNN	VR265-4.80HL	422C-480RST-PV
LR50S	5266VCC-4.80T2L	290-R0480T21LVNN	VR265-4.80T2L	422C-480SST-PV
LR50T	5266VCC-4.80T0L	290-R0480T23LVNN	VR265-4.80T0L	422C-480TST-PV
LR50U	5266VCC-4.80TM2L	290-R0480T24LVNN	VR265-4.80TM2L	422C-480UST-PV

See footnotes at end of table.

TABLE III. Commercial part number supersession data – Continued.

PIN designator AA59789/10	Vendor similar designator or type part number <u>1/</u> <u>2/</u>			
	CAGE 5BG68	CAGE 76096	CAGE 61081	CAGE 3E7U8
ER50M	5266VCC-4.80ETM2.5	290-R0480T32NVNN	VR265-4.80ETM2.5	422C-480MST-CV
ER50R	5266VCC-4.80EH	290-R0480T35NVNN	VR265-4.80EH	422C-480RST-CV
ER50S	5266VCC-4.80ET2	290-R0480T31NVNN	VR265-4.80ET2	422C-480SST-CV
ER50T	5266VCC-4.80ET0	290-R0480T33NVNN	VR265-4.80ET0	422C-480TST-CV
ER50U	5266VCC-4.80ETM2	290-R0480T34NVNN	VR265-4.80ETM2	422C-480UST-CV
DR50M	5266VCC-4.80ETM2.5L	290-R0480T32LVNN	VR265-4.80ETM2.5L	422C-480MST-CPV
DR50R	5266VCC-4.80EHL	290-R0480T35LVNN	VR265-4.80EHL	422C-480RST-CPV
DR50S	5266VCC-4.80ET2L	290-R0480T31LVNN	VR265-4.80ET2L	422C-480SST-CPV
DR50T	5266VCC-4.80ET0L	290-R0480T33LVNN	VR265-4.80ET0L	422C-480TST-CPV
DR50U	5266VCC-4.80ETM2L	290-R0480T34LVNN	VR265-4.80ETM2L	422C-480UST-CPV

1/ The CID PINs listed are only for length designator "50".

2/ The manufacturer's part number shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph in [A-A-59789](#).

PIN length examples. The CID PINs listed in table IV are for all available standard card holder lengths for this specification sheet. However, only one specific finish, mounting and configuration are listed (see PIN example for a break-down of the codes).

TABLE IV. Example of PIN with available length designators.

PIN designator AA59789/10	Vendor similar designator or type part number <u>1/</u> <u>2/</u>			
	CAGE 5BG68	CAGE 76096	CAGE 61081	CAGE 3E7U8
LH30S	5266VBH-2.80T2L	290-H0280T21LVNN	VHA265-2.80T2L	422C-280SSH-PV
LH40S	5266VBH-3.80T2L	290-H0380T21LVNN	VHA265-3.80T2L	422C-380SSH-PV
LH50S	5266VBH-4.80T2L	290-H0480T21LVNN	VHA265-4.80T2L	422C-480SSH-PV

1/ The manufacturer's part number shall not be used for procurement to the requirements of this CID specification sheet. At the time of preparation of this CID specification sheet, the aforementioned commercial products were reviewed and could be replaced by the CID PIN shown. For actual part marking requirements, see the marking paragraph in [A-A-59789](#).

2/ Other lengths are available on request.

Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

MILITARY INTERESTS:

Custodians:

Army – CR
Navy – EC
Air Force – 85
DLA – CC

Review activity:

Air Force – 99

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – FAS

Preparing activity:
DLA – CC

Project 5998–2016–016

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.